

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
10 February 2005 (10.02.2005)

PCT

(10) International Publication Number
WO 2005/011390 A1

(51) International Patent Classification⁷: A23B 7/00

(21) International Application Number:
PCT/IL2004/000713

(22) International Filing Date: 3 August 2004 (03.08.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
157234 4 August 2003 (04.08.2003) IL

(71) Applicant (for all designated States except US):
RAD NATURAL TECHNOLOGIES LTD. [IL/IL];
6 Ravnitzki Street, Segula Industrial Area, 49277 Petach
Tikva (IL).

(72) Inventors; and

(75) Inventors/Applicants (for US only): REZNIK, Rina
[IL/IL]; 36 Szold Street, 43219 Ra'anana (IL). HER-
SKOWITZ, Boris [IL/IL]; 2A/2 Jabotinski Street, 22380
Nahariya (IL).

(74) Agent: JEREMY M. BEN-DAVID & CO. LTD.; P.O.
Box 45087, Har Hotzvim Hi-Tech Park, 91450 Jerusalem
(IL).

(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
ZW.

(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,
FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,
SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the
claims and to be republished in the event of receipt of
amendments

For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.

(54) Title: COMPOSITIONS AND METHODS FOR IMPROVING THE EFFICIENCY OF PRESERVATIVES IN FOODS

(57) **Abstract:** The invention relates to a composition which comprises component (1) and at least one of components (2), (3) and (4): (1) a completely water-soluble antioxidant which is a Labialae tissue extract containing sodium rosmarinic acid; (2) ascorbic acid, isoascorbic acid and (or) their non-toxic water-soluble salts in a weight ratio to sodium rosmarinic acid of 1.5:1 to 90:1; (3) citric acid, its non-toxic salts, and (or) non-toxic water soluble salts of acetic and (or) lactic acids; (4) at least one non-toxic salt of propionic acid. Embodiments of such compositions are useful for enhancing the antioxidative protection afforded to meat products, or to edible oils or fats (or foodstuffs containing them), and for enhancing inhibition of microbial deterioration in foodstuffs provided by the acids and salts specified in ingredients (3) and (4).